**GIS Analyst (AidData REU)**

Global Research Institute

**Unit Mission Statement**

The Global Research Institute (GRI) empowers teams of William & Mary students and faculty to make a difference in the world. We are a multidisciplinary hub that applies scholarly research to real world problems, investing in outstanding student and faculty scholars to catalyze new insights and cultivate the next generation of global leaders. Based in the Office of the Provost, GRI supports a whole of university approach to advance W&M by developing ideas, convening partners, creating and analyzing data, and inventing new methods. The Institute’s approach to incubate and scale and applied research helps researchers push research frontiers and produce insights that matter at W&M and beyond. At any time, under the auspices of the Institute there are several research projects, most grant-funded, with the largest being AidData.

AidData produces novel data, tools, and research that answers the question: who is funding, what, where, for whom, and to what effect around the world? AidData has an explicit focus on data and research that meets high academic standards but is also accessible and relevant for a broad audience of international relations practitioners, policymakers, journalists, and scholars. AidData’s work is made possible by generous financial support of international organizations such as the World Bank and United Nations, private philanthropies such as the Hewlett and Gates Foundations, and government agencies such as the US Department of State and USAID.

**Position Summary**

The Geospatial Analyst will be responsible for helping AidData execute, expand, and facilitate interdisciplinary geospatial research on a wide range of projects. The Geospatial Analyst will:

(1) support interdisciplinary research, scholarship, and proposals with the opportunity to develop and lead their projects;

(2) develop workflows to transform time series remotely sensed imagery and open-source data into outcomes that help to understand socio-ecological and environmental issues in various parts of the world;

(3) design and integrate automated geospatial workflows into existing systems with rigorous testing and documentation;

(4) plan and carry out applied research, write reports and peer-reviewed articles, provide technical guidance, and advise on or initiate new and evolving technology and techniques; and

(5) support external funding from proposal conceptualization to data collection, analysis, geo-visualization, & dissemination.

The Geospatial Analyst will work primarily with the Geospatial Scientist.

**Required Qualifications**

**EDUCATION**

Bachelor’s degree in Geography, Spatial/Geospatial Science, Remote Sensing, Forestry and Natural Resources, or a related discipline with a research emphasis on geospatial analysis, or comparable experience/education.

**KNOWLEDGE, SKILLS, AND ABILITIES**

* Fundamental and advanced applied knowledge of geospatial data, methods, and science across disciplines.
* Research experience in natural and social science disciplines.
* Experience with cloud-based geospatial data environments (Google Earth Engine), including cloud functions, dataflow, and Google Cloud Run/App Engine
* Proven statistical skills to effectively provide geospatial support
* Proven ability to independently design and perform machine learning experiments
* Demonstrated expertise in geographically focused programming, using R or Python.
* Experience independently designing and implementing geospatial research projects/programs to advance the discovery and modeling of associations, trends, patterns, or system dynamics.
* Excellent (written and verbal) communication.

**Preferred Qualifications**

* Graduate degree in Geography, Spatial/Geospatial Science, Remote Sensing, Forestry and Natural Resources, or a related discipline with a research emphasis on geospatial analysis
* Familiarity with environmental stressors (e.g., soil erosion, land degradation, and declining water resources) and ways to analyze them using geospatial science
* Experience with ecological and hydrological modeling
* Familiarity with household survey methods and protocols
* Strong knowledge of open data standards
* Familiarity with International Aid Finance data standards and terminology.

**Application Instructions**

Candidates must apply via the William & Mary Employment Opportunities portal. For more details and to apply, please visit <https://jobs.wm.edu/postings/50614>. To apply, candidates will be required to submit resume and cover letter.

This is a restricted position subject to availability of funding.

**Equal Employment Opportunity Statement**

William & Mary values diversity and invites applications from underrepresented groups who will enrich the research, teaching and service missions of the university. The College is an Equal Opportunity/ Affirmative Action employer and encourages applications from women, minorities, protected veterans, and individuals with disabilities.

**Background Check Statement**

William & Mary is committed to providing a safe campus community. W&M conducts background investigations for applicants being considered for employment. Background investigations include reference checks, a criminal history record check, and when appropriate, a financial (credit) report or driving history check.

**Office Use Only**

**BUDGET INFORMATION**

Employment Category: Operational Exempt

University Pay Range: U10

Base Budget Amount: $57,000 - $65,407

Index/Account: 141305

Position Number: 00972W